

CLAIMSWHAT IS CLAIMED:

SUB (31)

1. An input device for providing user controlled inputs, comprising:

a strip of touch sensitive material, said strip having a substantially constant width and a length which is at least twice said width; and

an interface, connecting said strip to a computer and responsive to human contact with said strip in order to transpose the position of said contact into a data signal indicating the position of said contact along the length of said strip and to output said data signal.

2. An input device according to claim 1, wherein said interface does not transpose the widthwise position of said contact and said data signal does not indicate the widthwise position of said contact.

3. An input device according to claim 1, wherein said interface also transposes the pressure of said contact and said data signal also indicates the pressure of said contact.

4. An input device according to claim 1, wherein said

substantially constant width is approximately the width of a human finger.

5. An input device according to claim 4, wherein said input device further comprises a number of keys or buttons and wherein said data signal also indicates the selection of one or more of said keys or buttons.

6. An input device according to claim 5, wherein said number of keys or buttons is four and wherein said keys or buttons are located on said linear touch input device in a position so as to be operable by the fingers of a hand while said strip of touch sensitive material is simultaneously touched by the thumb of the hand.

SV32 7. A keyboard having an integrated touch input device, said keyboard comprising:

a housing supporting a plurality of keys, said housing having a top side, a bottom side, and left and right sides; and

5 a linear touch input device for providing user controlled inputs, said linear touch input device comprising:

a strip of touch sensitive material, said strip having a substantially constant width and a length which is at least twice said width; and

10 an interface, connecting said strip to a computer and

responsive to human contact with said strip in order to transpose the position of said contact into a data signal indicating the position of said contact along the length of said strip and to output said data signal.

8. A keyboard according to claim 7, wherein said interface does not transpose the widthwise position of said contact and said data signal does not indicate the widthwise position of said contact.

9. A keyboard according to claim 7, wherein said interface also transposes the pressure of said contact and said data signal also indicates the pressure of said contact.

10. A keyboard according to claim 7, wherein said substantially constant width is approximately the width of a human finger.

11. A keyboard according to claim 10, wherein said linear touch input device further comprises a number of touch keys or buttons and wherein said data signal also indicates the selection of one or more of said touch keys or buttons.

12. A keyboard according to claim 11, wherein said keys or buttons and said strip of touch sensitive material are located on

said linear touch input device in a position so as to be operable by the fingers of a hand while said strip of touch sensitive material is simultaneously touched by the thumb of the hand.

13. A keyboard according to claim 12, wherein said strip of touch sensitive material is located on the top side of said housing and said touch keys or buttons are located on said left side of said housing.

14. A keyboard according to claim 12, wherein said strip of touch sensitive material is located on the top side of said housing and said touch keys or buttons are located on the bottom side of said housing.

15. A keyboard according to claim 12, wherein said strip of touch sensitive material is substantially straight.

16. A keyboard according to claim 12, wherein said strip of touch sensitive material is substantially arc shaped.

17. A keyboard according to claim 7, further comprising a second linear touch input device and wherein said first linear input device is located at or near said left side of the keyboard and said second linear touch input device is located at or near said right side of the keyboard.

18. A method of providing user controlled inputs to a computer, the method comprising the steps of:

contacting a strip of touch sensitive material by hand; and

in response to said contact, converting the position of said contact into a data signal indicating the position of said contact along the length of said strip; and

outputting said data signal to a bus of said computer.

19. A method according to claim 18, wherein said step of transposing includes transposing the pressure of said contact and wherein said data signal also indicates the pressure of said contact.

20. A method according to claim 18, wherein said method comprises the further step of selecting one or more touch keys or buttons simultaneously with said step of contacting said strip of touch sensitive material and wherein said data signal also indicates the selection of one or more of said touch keys or buttons.

21. A method according to claim 20, wherein said touch keys or buttons are selected by the fingers of a hand while said strip of touch sensitive material is contacted by the thumb of the hand.

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25. A computer system according to claim 24, wherein said computer system further comprises a keyboard having a plurality of alphanumeric keys and outputting a keyboard signal indicating the selection of said alphanumeric keys by a user, said linear touch input device is integrated with said keyboard, and said processor operates in accordance with programming stored on a computer readable storage medium to perform processing of a text document in accordance with said keyboard signal and to control a display of said text document in accordance with said input data signal from said linear touch input device.

26. A computer system according to claim 23, wherein said computer system further comprises a pointing device and wherein said processor controls said image in accordance with said input data signal from said linear touch input device and a signal from said pointing device.

27. A computer system according to claim 26, wherein said pointing device comprises a two-dimensional pointing device and said processor processes the signal from said two-dimensional pointing device with said input data signal from said linear touch input device under the control of programming instructions to generate a three-dimensional input signal.

28. A computer system according to claim 22, wherein said

29. A computer program product for implementing a method of providing user controlled inputs to a computer comprising:

a computer program including

a routine for outputting said data signal
to a bus of said computer.

30. A computer program product according to claim 29, wherein said computer program is arranged to control the display of an image in accordance with said input data signal.

31. A computer program product according to claim 30, wherein said computer program controls scrolling of said display in accordance with said input data signal.

32. A computer program product according to claim 31, wherein said computer comprises a keyboard having a plurality of alphanumeric keys and outputting a keyboard signal indicating the selection of said alphanumeric keys by a user, said strip of touch sensitive material is integrated with said keyboard, and said computer program performs processing of a text document in accordance with said keyboard signal and to control a display of said text document in accordance with said input data signal.

33. A computer system according to claim 30, wherein said computer comprises a pointing device and wherein said computer program controls said image in accordance with said input data signal and a signal from said pointing device.

34. A computer system according to claim 33, wherein said pointing device comprises a two-dimensional pointing device and computer program includes a routine for processing the signal from said two-dimensional pointing device with said input data signal to generate a three-dimensional input signal.